

REMARKS

In the Office Action, claims 2-8 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for reasons enumerated in Paragraphs 3 and 4. In particular, the Examiner states that there is insufficient antecedent basis for the limitations "a plurality of sensing slots" and "a desired saliency" in claims 2-8 and "a plurality of sensing slots uniformly spaced around the rotor" in claims 4-6.

Additionally, claims 1-6 and 8-24 stand rejected under 35 U.S.C. 102(b), as being anticipated by Jansen et al. (U.S. Patent No. 5,585,709). In particular, claims 1-6 and 8-24 are rejected as containing all of the elements of the Jansen et al. reference as enumerated in Paragraph 6 of the Office Action.

Finally, claim 7 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Jansen et al. in view of Boyer (U.S. Patent No. 4,485,796). In particular, claim 7 is rejected as containing all of the elements of the Jansen reference except a post-assembly step, which the Boyer reference discloses.

Claim Rejections under 35 USC 112, Second Paragraph

Claims 2-8 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for reasons enumerated in Paragraphs 3 and 4. In particular, the Examiner states that there is insufficient antecedent basis for the limitations "a plurality of sensing slots" and "a desired saliency" in claims 2-8 and "a plurality of sensing slots uniformly spaced around the rotor" in claims 4-6. Applicant respectfully traverses the Examiner's rejection. However, in an effort to move this case towards allowance, Applicant has amended claims 2-8 to correct the perceived indefiniteness. These changes include canceling claim 1 without prejudice, amending formerly dependent claims 2

and 3 to incorporate the subject matter of claim 1, correcting other dependencies as a result of canceling claim 1, and modifying the claim language of claims 4-8 to more clearly define the subject matter and to correct any perceived antecedent basis problems. It is believed that these changes address all of the Examiner's concerns as enumerated in Paragraphs 3 and 4. Consideration of newly presented claims 2-8 is respectfully requested.

Claim Rejections under 35 USC 102(a) and 103(b)

Claims 1-6 and 8-24 stand rejected under 35 U.S.C. 102(b), as being anticipated by Jansen et al. (U.S. Patent No. 5,585,709). In particular, claims 1-6 and 8-24 are rejected as containing all of the elements of the Jansen et al. reference as enumerated in Paragraph 6 of the Office Action. Also, claim 7 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Jansen et al. in view of Boyer (U.S. Patent No. 4,485,796). In particular, claim 7 is rejected as containing all of the elements of the Jansen reference except a post-assembly step, which the Boyer reference discloses.

In the foregoing amendment, Applicant have amended formerly dependent claims 2, 3, 7, 8, 17, and 18 to be independent claims incorporating the subject matter of respective rejected base claims 1, 9 and 16. In doing so, Applicant have canceled rejected base claims 1, 9 and 16 without prejudice. The rejection of claims 1, 9 and 16 is rendered moot.

Regarding the rejection of claims 2, 10 and 17 for having sensor slots spaced uniformly around the outer periphery of the rotor similar to Jansen reference as enumerated in Paragraph 6, the Applicant respectfully traverses the Examiner's rejection. As stated in Columns 12 and 13 of the Jansen reference (U.S. Patent No. 5,585,709), the rotor slots 121 are formed over some

conductive bars 120, while slots 122 are formed over other conductive bars 120. No information is given as to whether these slots 121, 122 are uniformly spaced around the rotor, contrary to the Examiner's analysis. Further, in reviewing Figure 11 of the Jansen reference, it is not clear as to the relative location of these slots around the outer periphery of the rotor. It appears that some of the slots appear to be off center with respect to some conductive bars 120 and directly centered with respect to other conductive bars 120. This implies non-uniform spacing between the sensor slots around the rotor. As such, the Jansen figures are, at best, insufficient, and more likely non-anticipating, with regard to the relative location of the rotor slots. Reconsideration of amended claims 2 and 10 is respectfully requested.

Further, inasmuch as claims 4-8 depend from amended claim 2, claims 13-15 depend from amended claim 10, and claims 20-24 depend from amended claim 17, it is respectfully submitted that these claims are allowable as well. Each claim recites sensor slots uniform spaced around the rotor, which the Jansen et al. reference does not disclose or suggest. Reconsideration of claims 4-8, 13-15 and 20-24 is thus also respectfully requested.

As to the Examiner's rejection of claims 3, 11 and 18, the Applicant has amended these claims to include the further limitation "wherein an adjacent pair of said plurality of sensing slots are variably spaced with respect to the next adjacent pair of said plurality of sensing slots". Inasmuch as Figure 14 and the Jansen specification in Column 17, lines 14-24 require that the slots 144 be formed centered about the four orthogonal axis, it thus requires that two adjacent pairs be similarly uniformly spaced, not variably spaced. In view of this, amended independent claims 3, 11, and 18 are not anticipated by the Jansen reference, as the Jansen reference does not disclose or suggest having a pair of said plurality of

sensing slots variably spaced with respect to the next adjacent pair of said plurality of sensing slots. Reconsideration of amended claims 3, 11, and 18 is thus respectfully requested. As claim 12 and new claims 25-27 are dependent from respective independent claims 3 and 18, these claims are similarly not anticipated by the Jansen reference. Reconsideration of claim 12 and consideration of new claims 25-27 is respectfully requested.

Regarding the rejection of claim 7 under 103(b), Applicant respectfully traverses the Examiner's rejection. First, it is not clear by the Examiner's remarks in Paragraph 8 as to whether claim 7 is rejected in view of Boyer or in view of Morrill. Clarification is respectfully requested. Regardless, claim 2, from which amended claim 7 now depends, is not anticipated by Jansen et al. for at least the reasons stated above. As such, the addition of Boyer, or Morrill, to Jansen et al. would not render obvious the present invention because neither Jansen et al., nor Boyer, nor Morrill teach or suggest sensor slots uniform spaced around the rotor made in a post-assembly step.

For similar reasons, newly presented claim 25 would also not be rendered obvious by the addition of Boyer, or Morrill, to Jansen et al. because it requires sensing slots variably spaced with respect to the next adjacent pair of said plurality of sensing slots made in a post-assembly step. Reconsideration of amended claim 7 and consideration of newly presented claim 25 is respectfully requested.

In view of the foregoing amendments and remarks, the Applicant submits that claims 2-8, 10-15, and 17-27 are all in proper form and patently distinguish from the prior art. Accordingly, allowance of the claim and passage of the application to issuance is respectfully requested.

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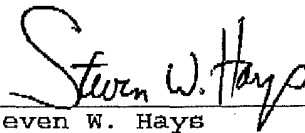
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The Examiner is invited to telephone the Applicant's undersigned attorney at (248) 223-9500 if any matters remain unresolved.

Respectfully submitted,

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